S
629.1305
A60
V.6.No.2
FEB.55

Montana State Library
3 0864 1006 7571 2
MAR 11 1955

FRANK W. WILEY, DIRECTOR

COMMISSION MEMBERS

Mac Johnson, Chairman

Charles A. Lynch, Vice Chairman — H. L. Cummings

Gordon C. Sands, Secretary — Stanley Nees

W. A. Carson — Alfred F. Klingler

Published by
MONTANA AERONAUTICS COMMISSION
P. O. Box 1698 Helena, Montana

Member of
National Association of State Aviation Officials

Vol. 6 No. 2 February 1955

REPORT OF THE DIRECTOR

The following items are taken from the monthly report of the director to the commission at a regular meeting held in Helena on Feb. 1, 1955:

Missoula MPA Meeting and U. S. Forest Service

The director attended a meeting in Missoula on Jan. 13th to meet with the MPA and discuss Senate Bill No. 13 on aviation gasoline tax.

Forest Service officials were contacted relative to the operation of Seeley Lake and Condon airstrips. The Forest Service advised they would continue to operate the Condon strip and would lease the Seeley Lake airstrip to the Montana Aeronautics Commission.

Report to Governor

Copies of the report to the governor have been prepared and distributed to aeronautics directors of other states and to other persons interested in aviation in Montana.

Economic Survey

The project requested by the Montana Aviation Trades Association pertaining to an aviation economic survey is being prepared and forms used by other agencies in other states have been received to be used in drafting forms for the economic survey in Montana.

National Park Landing Strips

Letters have been received from various agencies relative to the construction of landing strips within the national park boundaries. The Secretary of the Interior has advised that provisions have been made under the Federal Airport Act to construct landing strips within the boundaries of the national parks.

General Bean of the Civil Air Patrol has advised that he will contact the Secretary of the Interior. George Nelson, the director of operations for Wyoming, will attend the NASAO winter board meeting in Washington and he is taking the matter of landing strips within national park boundaries up with NASAO members. The subject will also be covered at a meeting of the directors of aeronautics of the northwest states which will be held in Boise on Friday, Feb. 4th.

MILITARY RECOMMENDS THAT VOR DME PROGRAM BE DROPPED

The Air Navigation Development Board consisting primarily of military representatives recommended that a common system of air navigation by radio be adopted as the primary navigation aid for aircraft for the United States.

The system recommended is labeled as "TACAN," the mechanics of which is still a military secret. It is understood that TACAN does not include facilities for voice transmission and pin point position may be maintained in navigation at all times. The AND Board recommended that VOR DME be continued in operation until 1956.

The above statement was made on February 8th in an official announcement which caused strong comment by various aviation groups and interests with protests arising from all segments of aviation except the airlines. The Aircraft Owners and Pilots Association, headed by Max Karant, pointed out that a policy following the recommendation of the AND Board would result in the immediate obsoleting of aircraft equipment in some 50 thousand airplanes. The CAA took a similar position in pointing out that TACAN had not been proven and protested the recommendation of the board which later modified the original announcement by suggesting that VOR DME be continued at least until 1965.

The private aircraft owner is vitally concerned in the controversy as the elimination of existing radio navigation aid including low frequency and VOR could very well eventually eliminate the operation of private aircraft in controlled air spaces throughout the United States. It is to the interest of every aircraft owner and every pilot organization to maintain active contact with our national legislators and to follow the developments of this controversy regarding jurisdiction of aircraft radio operations and air space over our country. We in the United States have a unique privilege of being able to own and operate aircraft as individuals. This is a democratic principle, however, it involves problems in traffic control and in navigation which makes it difficult for the coordination of the operation of aircraft ranging in speed from 70 miles per hour to thousands of miles per hour.

Your state aeronautics commission and our National Association of State Aviation Officials are definitely supporting the rights of the private individual to own, operate and enjoy the use of aircraft within this country.

ANNUAL CONVENTION MPA
May 7th and 8th
Cut Bank

The annual convention of the Montana Pilots Association will be held in Cut Bank on May 7th and 8th. Announcement of the convention and advertising material will appear in the mails. Publicity is being given by Cut Bank pilots who are painting signs of the convention notice on the sides of their airplanes.

Mark this date on your calendar and watch for the convention program.

WAIVER FOR AIRCRAFT CROSSING UNITED STATES-CANADIAN INTERNATIONAL BOUNDARY WITHOUT RADIO

The Montana Aeronautics Commission has worked with CAA Liaison Officer Howard Firebaugh in obtaining a waiver for aircraft to enter the Air Defense Identification Zone in crossing the international boundary without being equipped with two-way radio.

This office has been advised by Howard Firebaugh that Non-Observance Authorization No. GTF-3 has been approved pertaining to waiver of two-way radio requirements of Regulations of the Administrator, Part 620 for certain aircraft crossing the United States-Canadian International boundary.

Specific routes of approach for aircraft not equipped with two-way radio has been laid out for crossing the international boundary into the ADIZ, as follows:

Aircraft not equipped with radio in Canada wishing to enter the United States may fly from points in Alberta to Lethbridge and clear customs following which they will fly directly from Lethbridge to Cut Bank clearing customs at Cut Bank. Aircraft in Alberta may fly to Medicine Hat and clear Canadian customs. The aircraft will depart from Medicine Hat, fly directly to Gravenlock which is located approximately 30 miles north of Havre. They will fly from there directly to Havre and will clear customs in Havre by telephone to Great Falls.

Aircraft in Saskatchewan may clear Canadian customs at Swift Current and fly from there to Govenlock and then to Havre and clear U. S. Customs. Aircraft in Saskatchewan may clear customs at Swift Current and fly directly to Harptree which is located 35 miles north of Scobey and fly from Harptree to East Poplar where they may clear U. S. Customs. Air craft in Saskatchewan may clear Canadian customs at Regina and fly from there directly to Harptree and then to East Poplar where they may clear U. S. Customs.

All non-radio equipped aircraft entering the ADIZ from the north in Canada will follow the procedure and fly along the routes as given above below 2000 feet above the terrain and within ten miles of center line of flight.

The routes listed above and the points listed above may be located and plotted on the Milk River World Air Chart No. 217. A copy of the Non-Observance Authorization No. GTF-3 is on file in the office of the Montana Aeronautics Commission and you will be advised of any changes in the above procedure through the medium of this publication.

ONE OUT OF EVERY TEN

One out of every 10 acres under cultivation in the United States is treated for insect control by agricultural airplanes.

Use of these planes on the farmlands of America accounts for savings of nearly $5 billion annually.

Typical of ways aircraft save money are (1) in control of gypsy moth in northeastern states, one twin-engined plane sprays a larger area in a single day than formerly could be covered by 40 power sprayers in an entire season. And the work is done more effectively.

(2) On a comparative timber insect survey in Colorado, one pilot and two observers covered 2,500 acres in 15 minutes' flying time. A survey of the same area by a ground crew required the time of six men for two weeks. (The aerial survey was 70 percent accurate, considered satisfactory for the purpose.)

Throughout the country approximately 7,000 planes (worth $500,000,000) are operated for the application of pesticides. The aircraft range from single-engined utility planes to helicopters and converted World War II bombers and patrol planes. About one-half of the planes are older type biplanes, although considerable attention is now being given to development of aircraft designed especially to meet the needs of farmers.

Approximately 2,000 applicator firms are engaged in agricultural work applying such materials as insecticides, herbicides, fungicides, cotton defoliants, fertilizers and seeds.—Idaho Rudder Flutter.

VOR DME-TACAN?

Commerce Secretary Sinclair Weeks has replied to an Aircraft Owners and Pilots Association telegram questioning the decision of Robert B. Murray, Jr., in the VOR DME-TACAN dispute. Weeks said that he concurred in Murray's action and that if AOPA had any new information to offer on the subject it should be submitted to the Air Navigation Development Board.—2-17-55.

ADO DEVELOPS AMPHIBIOUS FLOAT FOR CESSNA 180

Edo Corp., College Point, L.I.N.Y. has developed the Model 249 amphibious float for the Cessna 180 and expects to be able to make delivery this spring. In effect, Edo said, the Cessna plane becomes an amphibian with a total weight increase of 150 pounds.

It was also reported that De Havilland Aircraft of Canada has modified a set of Edo 4980 floats for the DH Beaver bushplane. These are built by Edo's Canadian licensee, MacDonald Brothers Aircraft Ltd.—Am. Avn. Daily.

NATIONAL ASSOCIATION OF STATE AVIATION OFFICIALS

PURPOSE:—"To foster aviation as an industry, as a mode of transportation for persons and property and as an arm of the national defense; to join with the Federal Government and other groups in research, development, and advancement of aviation; to develop uniform aviation laws and regulations; and to otherwise encourage co-operation and mutual aid among the several states."

CAN PILOTS WORK ON THEIR PER NAL AIRCRAFT

The Civil Aeronautics Administration says they can! But only up to a certain point. THAT POINT IS VERY DEFINITE. It is called PREVENTATIVE MAINTENANCE and the specific items that airplane pilots can do are definitely set forth.

Exceeding these limits by pilots, who are not certificated mechanics can be dangerous to themselves as well as their passengers. It may lead to violation reports, fines, loss of pilot certificates, grounding of the airplane for unairworthiness or, if not worse, meaning personal injury.

Here is the LAW—Civil Air Regulation Part 18.10 (c):

"A certificated pilot may perform such preventive maintenance on an aircraft owned or operated by him, except aircraft used in air carrier service, as may be authorized by the Administrator."

This is the definition of PREVENTIVE MAINTENANCE ITEMS as given in Civil Aeronautics Manual 18.1 (a) (22).

"Private Maintenance shall mean simple or minor preservation operations, and the replacement of small standard parts not involving complex assembly operations."

These Are the Authorized Items

Civil Aeronautics Manual 18. 1-6 Preventive Maintenance. The following are considered to be typical preventive maintenance operations.

Removal, installation and repair of landing gear tires.

Replacing of elastic shock absorber cords on landing gear.

Servicing landing gear shock struts by adding oil and/or air.

Servicing land gear wheel bearings, such as cleaning and greasing.

Replacing defective safety wiring or cotter keys.

Any lubrication not requiring dis-assembly other than removal of non-structural cover plates, cowlings, fairings, etc.

Making simple fabric patches not requiring rib stitching or the removal of structural parts or control surfaces.

Replenishing hydraulic fluid in hydraulic reservoir.

Refinishing decorative coating of fuselage, wings, and tail group surfaces (excluding balanced control surfaces), fairings, cowling, landing gear, cabin or cockpit interior not requiring removal or dis-assembly of any primary structure or operation system such as a hydraulic or fuel system.

Applying preservatives or protective material to components where no dis-assembly of primary structure or operation system is involved, such as seaplane preservation, (paraffaline to control cables, etc.), anti-corrosive paint to structures or components where such coating is not prohibited or is not contrary to good practices.

Cabin and cockpit upholstery work (repairing upholstery and decorative furnishings) which does not require disassembly of any primary structure of the aircraft.

Small simple repairs to fairings, nonstructural cover plates, cowling, such as drilling "dope" holes, small patches and reinforcements, not making any change in contour where such change would interfere with proper airflow.

Replacing of side windows where such work does not interfere with structure or any operating system or such as controls, electrical equipment, etc.

Replacing of safety belts.

Replacing of seats or seat parts with replacement parts approved for the aircraft not involving disassembly of any primary structure or operating system.

Trouble shooting and repairing broken wires or connecting light wiring circuits.

Replacing of bulbs, reflectors, and lenses of position and landing lights.

Replacing of wheels and skis where no weight and balance computations are involved.

Replacing of any cowling not requiring removal of the propeller or any disconnecting of flight controls.

Replacing or cleaning and setting of spark plug gap clearance.

Replacing of prefabricated fuel lines.

Cleaning fuel and oil strainers.

Replacing of batteries and checking fluid level and specific gravity.

There they are. Did you not know many times reference was made that you can do certain things provided you do not have to unbutton primary structure and or operating systems?

Preventive maintenance does not mean changing propellers, engines, wings, control surfaces, or their metal cables, grind valves, replace piston rings, install radios or other electrical equipment.

When in doubt see your CAA certified mechanic.—Wyo. Newsletter

ITINERARY FOR CAA SAFETY AGENTS FOR MONTH OF MARCH

Big Timber—1
Billings—7, 14
Bozeman—15
Glasgow—9
Glendive—16
Great Falls—3
Havre—8
Helena—4, 11, 18, 25
Kalispell—23
Lewistown—29
Livingston—9
Miles City—17
Missoula—24
Wolf Point—10

CAA REQUESTS FOLLOWING PROCEDURE ON FILING FLIGHT PLANS

Telephone rather than microphone your flight plans—or else file them in person prior to departure. Reserve your air-ground channels for information which could not be given prior to departure or after arrival. Your life may depend upon proper utilization of air-ground channels. Do not congest this life-line with unnecessary transmission.

CHECKS

Just how accurate is your pre-takeoff check? Came across an item the other day where a man and his wife were killed when their plane crashed shortly after takeoff. Examination revealed the gasoline selector switch was on empty tank. Why not use a check list—your life may be the price! This goes for checking to land as well.—S. Carolina Newsletter.

WANTED

Experienced PA18A spray pilot for long season, starting on or about March 15th. Will have opportunity to lease our equipment and work directly with customers 1956. Write Walter E. Huttman, Sky Flight Inc., Big Timber, Montana.

WHAT'S YOUR EYE-Q

By

J. Kidera, M.D., United Air Lines

Many can have come to my attention where the pilot needing glasses for near work does not get the full advantage of the ophthalmologist or lens maker's many tricks of the trade. In prescribing glasses the ophthalmologist takes into consideration the occupation of the patient and can by varying the size of the segments in bifocals make the lens more adaptable to a particular occupation. There are many examples of this. In the case of musicians where the music stand may be 20 to 22 inches away from the musician, the focal length of the lower segment is set at this distance and is made sufficiently large so that the entire sheet of music is covered by the lower segment. In this case the upper segment would contain the musician's correction for distance and would be adjusted so that the musician could glance up at the conductor merely by shifting his eyes rather than by moving his head up or down. In making corrective lenses for switchboard operators the eye doctor prescribes glasses that contain only a correction for near work with little regard for distance correction since the switchboard operator has her entire occupational function at arms length.

"For discussion purposes we can consider three variations or types of bifocals. The first variety can be considered the usual type which is required in the mid-forties. This consists of a small lower reading segment and a much larger upper segment for distance. The second variety can be considered as a reverse type bifocal, which consists of three definite segments in the lens, the lower portion corrected for reading—focal length 15 to 20 inches, the central segment for distance and the upper segment corrected for a focal length of 20 inches. Some pilots who need glasses for near work have a pair of glasses made with the reading segment inserted in the upper portion so that overhead instruments can be brought into sharp focus when viewed by an upward gaze. The third variety of bifocal type glasses is that in which the lower reading portion covers one-half to two-thirds of the lenses and the remaining upper portion contains the distant correction. Some of our pilots have this type of correction. When these glasses are properly made and fitted the pilot can, when comfortably seated in the cockpit, view all of the area in the cockpit below the window level through a lens correcting his vision for near work and view everything outside the cockpit through the upper segment of the glasses. The line of separation between the upper and lower half would fall at the lower edge of the cockpit window.

"The problem of placing correct segments in glasses is a technical operation but must be individualized. The ideal situation is one in which the pilot seated comfortably in the cockpit can look through the required lenses at near or distant objects merely by shifting the position of the eyes without resorting to any movement of the head. This is a particularly important factor since many cases of headaches and stiffness of the neck after long flights are due to poor positioning of focal segment which forces the pilot to hold his head in an awkward position and require repeated nodding of the head to utilize a particular segment of his glasses.

"When the time comes, if it hasn't already arrived, when a near correction is required, the positioning of the segments should be thoroughly discussed with the ophthalmologist in order that the lens maker can give you a pair of glasses individualized for your needs and suited to your occupational requirements. These glasses may only be practical for use while flying. You may find it desirable to have an additional pair of glasses with a more usual placement of corrective segments for your every day use."—Flight Safety Foundation.

Be courteous, be careful, be circumspect. This distinguishes the Pilot from the "Flyer."

FOR SALE

1946 Stinson Station Wagon. 50 hours since major overhaul, new crankshaft, pistons, cylinders, etc. Very clean, excellent condition, with or without complete set of hydraulic wheel skis.

75 gallon Whitaker belly tank fits PA 11, PA-18 Cub. Complete with new pump, booms, nozzles, fitting. Contact Red Lodge Airways, Box 461, Red Lodge, Montana.

FOR SALE

1947 Stinson SW 161-00 since MOH, tabin very good. New belly. Blue. Fabric refinished. McCauley 7649 seaplane prop. 8.00x6 tires. Scott tailwheel. Price $2250. With 60 gal. spraying gear $2450. Relicensed Jan 11. Write Choteau Flying Service, Choteau, Montana.

FOR SALE

One PT19 airplane with hatch, total time since major 150 hours, unlicensed. Miscellaneous assortment of Jacobs motor parts. Twin engine Cessna parts together with various propellors and aeronautical equipment; miscellaneous supplies from Montana Skyways operation. Write R. W. Gruber, 44 North Park, Telephone 631-W, Helena, Montana.

FOR SALE

Sprayers Attention. One 1947 Dodge, 3 compartment, factory built tanker, 760, 190 and 540 gal., 2-speed rear end new engine, power pump, 100 feet neoprene hose, price $1600, will take J-3 Cub in trade. Write Mamer-Schreck, Felts Field, Spokane, Washington.

FOR SALE

PA-18A 135 HP. Piper sprayer, with dusting and fertilizing and seeding attachments. Total time on aircraft and engine by recording task 273 hours. Like new condition. Write Tom Herrod, Geraldine, Montana.

FOR SALE

1946 Cessna 120, 5 hours since top overhaul, full electrical system, recording tach, two-way radio, plane is clean and fast. Price $1500.00. Write Frank Sime, Baker, Montana, Box 53.

WANTED TO BUY

Four J-3 Cubs. Write Mamer-Schreck Air Transport, Felts Field, Spokane, Washington. Phone LAkeview 7281.

Use Feeder Airline Service

Billings, Miles City, Glendive, Sidney, Wolf Point

"USE IT OR LOSE IT"

Sec. 34.66, P. L. & R.
U. S. POSTAGE
PAID
HELENA, MONTANA
Permit No. 2

Mrs. Loretta Bo Peck
School of Mines
Butte, Montana

MONTANA AERONAUTICS COMMISSION
ORO Y PLATA

News Letter

P. O. Box 1698
Helena, Montana